MyFirstMarkdown

2022-06-28

R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

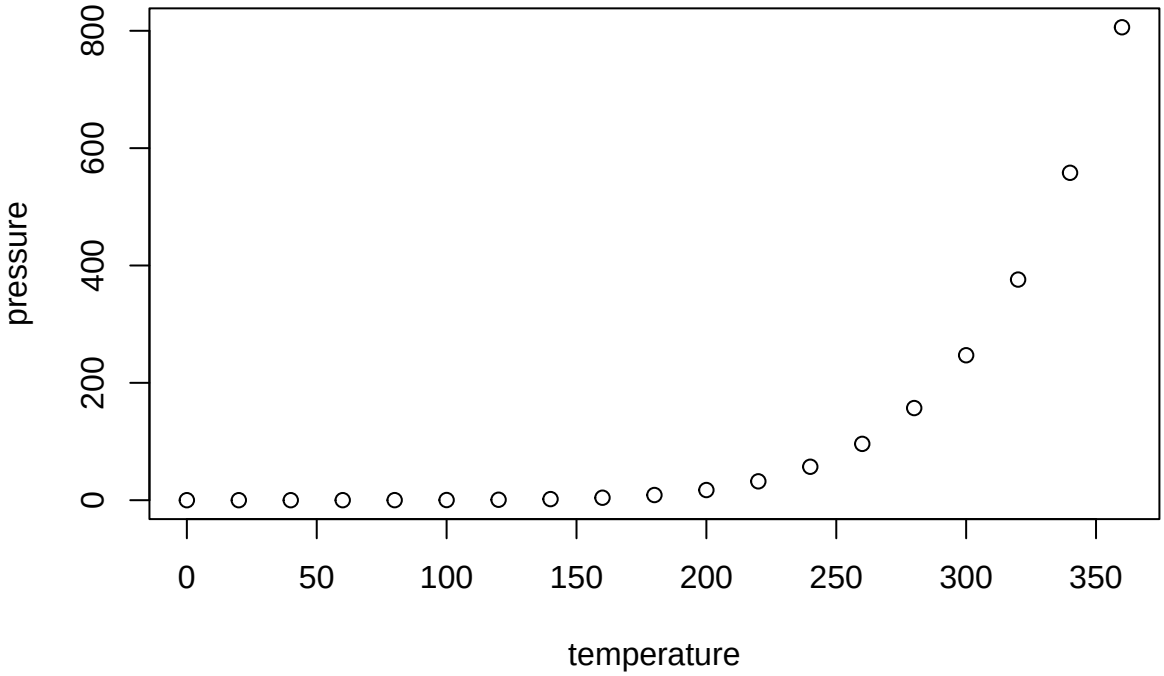
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed           dist       
##  Min.   : 4.0   Min.   :  2.00  
##  1st Qu.:12.0   1st Qu.: 26.00  
##  Median :15.0   Median : 36.00  
##  Mean   :15.4   Mean   : 42.98  
##  3rd Qu.:19.0   3rd Qu.: 56.00  
##  Max.   :25.0   Max.   :120.00
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```
library(readr)
iris <- read_csv("iris.csv", col_names = F)
```

```
## Rows: 150 Columns: 5
## -- Column specification --------------------------------------------------------
## Delimiter: ","
## chr (1): X5
## dbl (4): X1, X2, X3, X4
##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```
colnames(iris) <- c('Sepal.Length', 'Sepal.Width', 'Petal.Length', 'Petal.Width', 'Class')

sapply(iris, class)
```

```
## Sepal.Length  Sepal.Width Petal.Length  Petal.Width        Class
##    "numeric"    "numeric"    "numeric"    "numeric"  "character"
```

```
iris$Class <- as.factor(iris$Class)
sapply(iris, class)
```

```
## Sepal.Length  Sepal.Width Petal.Length  Petal.Width        Class
##    "numeric"    "numeric"    "numeric"    "numeric"     "factor"
```

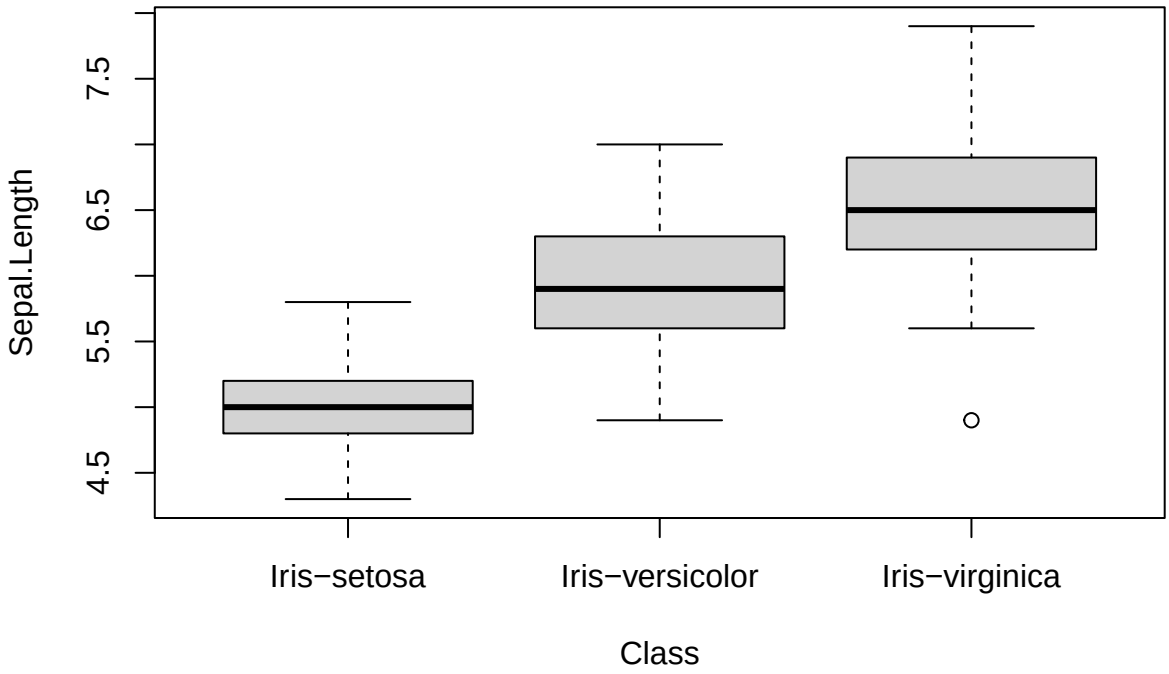
```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
##
## The following objects are masked from 'package:stats':
##
##     filter, lag
##
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
iris %>% group_by(Class) %>% summarize(Min.Sepal.Length = min(Sepal.Length, na.rm=T),
                                       Max.Sepal.Length = max(Sepal.Length, na.rm=T),
                                       Mean.Sepal.Length = mean(Sepal.Length, na.rm=T),
                                       SD.Sepal.Length = sd(Sepal.Length, na.rm=T)) %>% as.data.frame()
```

```
##             Class Min.Sepal.Length Max.Sepal.Length Mean.Sepal.Length
## 1     Iris-setosa              4.3              5.8             5.006
## 2 Iris-versicolor              4.9              7.0             5.936
## 3  Iris-virginica              4.9              7.9             6.588
##   SD.Sepal.Length
## 1       0.3524897
## 2       0.5161711
## 3       0.6358796
```

```
boxplot(Sepal.Length ~ Class, data = iris)
```




```
boxplot(Sepal.Width ~ Class, data = iris)
```